




# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,801	04/16/2004	Edwin J. Cuellar	SNDK.363US0	1472
36257	7590	08/19/2005	EXAMINER	
PARSONS HSUE & DE RUNTZ LLP 655 MONTGOMERY STREET SUITE 1800 SAN FRANCISCO, CA 94111			KIM, TAE W	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/826,801	CUELLAR ET AL. 	
	Examiner	Art Unit	
	Tae W. Kim	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/16/04.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/13/05</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Le (US 6,890,188).

With respect to claim 1, Le discloses a memory card system, comprising: an enclosed electronic circuit card having first and second sets of electrical contacts with different contact patterns positioned apart from each other such that they mate with a respective one of first and second mating receptacles but not the other (Fig 1 Parts 3 & 4, Fig 2 Parts 14 & 15, Col 2 Lines 1-10), at least the first set of contacts being carried by an outside surface of the card, (Fig 2 Parts 14 & 15) a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card with different signal protocols though either of the first or second sets of contacts without use of the other (Figs 7-10 Parts 72, 88, 96, & 108, Col 9 18-23, Col 2 Lines 1-10), and a cover carried by the card and moveable by hand between at least first and second positions with respect to the card, the first set of contacts being covered when the cover is in the first position and exposed for insertion into

Art Unit: 2876

the first mating receptacle when the cover is in the second position (Fig 3 Parts 29A & 29B, Fig 4B Part 39, Fig 5A Parts 49A & 49B, Fig 5B Parts 49A & 49B, Col 6 Lines 36-43).

With respect to claim 2, Le discloses the memory card system of claim 1, wherein the first set of contacts has a contact pattern and signal protocol therethrough that follows a USB standard (Fig 2 Part 13, Col 3 Line 65 to Col 4 Line 5).

With respect to claims 3 & 4, Le respectively discloses the memory card system of claim 2, wherein the second set of contacts has a contact pattern and signal protocol therethrough that follows a memory card standard and the memory card system of claim 3, wherein the memory card standard is a SD card standard (Col 5 Lines 5-14).

With respect to claim 5, Le discloses the memory card system of claim 2, wherein the second set of contacts is also carried by an outside surface of the card (Fig 2 Part 14).

With respect to claims 6 and 8, Le respectively discloses the memory card system of claim 5, wherein the cover is slideable between its first and second positions and the memory card system of claim 6; wherein the second set of contacts is not covered when the cover is in the second position (Fig 6A & 6B Part 59, Col 7 Lines 46-66).

With respect to claims 7, Le discloses the memory card system of claim 6, wherein the second set of contacts is covered when the cover is in the second position (Col 8 Lines 48-53).

With respect to claims 9 and 10, Le respectively discloses the memory card system of claim 1, wherein the cover is connected with the card by a hinge about which the cover is rotated between its first and second positions and the memory card system of claim 9, wherein the second set of contacts are not covered when the cover is in the second position (Fig 4A & Fig 4B, Col 6 Line 65 to Col 7 Line 6).

With respect to claims 11 and 12, Le respectively discloses The memory card system of claim 1, wherein the cover includes two parts that are each connected with the card by a hinge about which the cover part is rotated between the first and second positions of the cover, the hinges being spaced apart across the card and the memory card system of claim 11, wherein the second set of contacts are not covered when the cover is in the second position (Figs 4A & 4B, Fig 5A & 5B, Col 6 Line 65 to Col 7 Line 6).

With respect to claims 41, Le discloses a method of transferring data between a first host having a first receptacle for receiving and connecting with a first set of circuit card contacts according to a first circuit card published standard and a second host having a second receptacle for receiving and connecting with a second set of circuit contacts according to a second circuit card published standard, wherein the first and second sets of contacts are physically incompatible with each other and the formats of at least some of the signals communicated therethrough are also incompatible with each other (Fig 1, Col 2 Lines 1-10, Col 3 Lines 58-64), comprising: providing a memory circuit card containing re-programmable non-volatile memory that is accessible for transfer of data therewith through either of the first and second sets of circuit card contacts externally positioned thereon at spaced apart locations (Figs 7-10 Parts 72, 88, 96, & 108, Col 9 18-23, Col 2 Lines 1-10), wherein a cover exists over the first set of memory circuit card contacts, removing the cover from the first set of memory circuit card contacts, thereafter inserting the first set of memory circuit card contacts into the first receptacle of the first host, thereafter transferring data from the first host into the memory of the memory circuit card through the first set of memory circuit card contacts, thereafter removing the first set of memory circuit card contacts from the first host, thereafter replacing the cover over the first set of

memory circuit card contacts, thereafter inserting the second set of memory circuit card contacts into the second receptacle of the second host, and thereafter transferring the data from the memory of the memory circuit card into the second host through the second set of memory circuit card contacts (Fig 3 Parts 29A & 29B, Fig 4B Part 39, Fig 5A Parts 49A & 49B, Fig 5B Parts 49A & 49B, Col 6 Lines 36-43).

3. Claims 13-22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Le (US 6,908,038).

With respect to claim 13, Le discloses a memory card system, comprising: an enclosed electronic circuit card having first and second sets of electrical contacts positioned on outside surface areas thereof with different contact patterns (Fig 1 Parts 14 & 15, Col 2 Lines 1-15), the first and second sets of electrical contacts being spaced apart a distance in one direction along the card (Fig 1 Parts 14 & 15), a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card through either of the first or second sets of contacts without use of the other (Col 9 Lines 6-20, Figs 5-8 Parts 52, 68, 76, & 88), and a sleeve surrounding the card in a manner to be slid by hand in said one direction relative to the card between a first position exposing the first set of contacts while covering the second set of contacts and a second position exposing the second set of contacts while covering the first set of contacts (Col 2 Lines 27-30, Fig 3 Part 29, Fig 4A & 4B Part 39).

With respect to claim 14, Le discloses the memory system of claim 13, wherein the sleeve and the card have relative dimensions so that the card fits within a footprint of the sleeve when the sleeve is in the first position (Col 8 Lines 23-46, Fig 4A & 4B).

With respect to claims 15 and 17, Le respectively discloses the memory system of claim 14, wherein the sleeve includes one or more apertures positioned to expose the first set of contacts therethrough when the sleeve is in the first position and the memory system of claim 15, wherein the sleeve has an open portion of an end through which the card extends to expose the second set of contacts outside the footprint of the sleeve when the sleeve is in the second position (Fig 4A & 4B, Col 2 Lines 27-30, Col 2 Lines 60-65).

With respect to claim 16, Le discloses the memory system of claim 14, wherein the sleeve has an open portion of an end through which the card extends to expose the second set of contacts outside the footprint of the sleeve when the sleeve is in the second position (Fig 4A & 4B, Col 2 Lines 27-30, Col 2 Lines 60-65).

With respect to claims 18 and 19, Le respectively discloses the memory system of claim 17, wherein the pattern of the first set of contacts is arranged in accordance with a published memory card standard (Col 2 Lines 1-9) and the second set of contacts is arranged in accordance with a published USB connector standard and the memory system of claim 18, wherein the pattern of the first set of contacts is arranged in accordance with the SD card standard and the footprint of the sleeve has dimensions in accordance with the SD card standard (Col 2 Lines 40-54).

With respect to claims 20 and 21, Le respectively discloses The memory system of claim 13, wherein the pattern of the first set of contacts is arranged in accordance with a published memory card standard and the second set of contacts is arranged in accordance with a published USB connector standard and the memory system of claim 20, wherein the pattern of the first set

Art Unit: 2876

of contacts is arranged in accordance with the SD card standard (Col 2 Lines 1-9, Col 2 Lines 40-54).

With respect to claims 22, Le discloses the memory system of claim 17, wherein the sleeve contains wall segments adjacent the open portion of the end that defines the second position of the sleeve relative to the circuit card (Fig 3 Part 29, Fig 4A & 4B Part 39, Col 2 Lines 27-30).

With respect to claims 24, Le discloses the memory system of claim 17, wherein an end of the sleeve opposite to the end containing the open portion includes a stop that defines the first position of the sleeve relative to the circuit card (Fig 3 Part 26, Col 7 Lines 32-47).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 23, 25-35, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le (US 6,908,038) in view of Nishizawa (US 6,669,487).

With respect to claim 23, Le discloses the memory system of claim 22. However, Le does not disclose that the first and second sets of contacts are positioned on a common side of the



circuit card, and wherein the sleeve includes an open region adjacent the end containing the open portion that exposes a portion of an opposite side of the circuit card.

Nishizawa however discloses that the first and second sets of contacts are positioned on a common side of the circuit card (Figs 1 & 2, Figs 11 & 12: Contacts are positioned on the side of the card facing out of the page. In addition, the contacts are grouped into sets of contact such as a set of contacts for the memory card or a set of contacts for the SIM card.), and wherein the sleeve includes an open region adjacent the end containing the open portion that exposes a portion of an opposite side of the circuit card (Fig 13 A&B Part 26: This reference refers to a slot, instead of a sleeve.).

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the first and second sets of contacts are positioned on a common side of the circuit card to the memory system of claim 22 for the purpose of simplifying the design of the connectors both on the host side and on the card and for the purpose of being able to add multiple functions to the card without increasing the card's size. Nishizawa teaches the zigzag arrangements of contacts on the card with corresponding mating contacts in the slot. To interface with the specific function of the card, the slot's contacts on a single inner surface are arranged to mate with the subset of contacts that correspond to that specific function. Having contacts disperse on multiple surfaces of the card and the slot would complicate the design and having to put difference interfaces either on different surfaces of different edges could potentially force the card to be larger than the standard form factor for the memory card. In addition, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the sleeve includes an open region adjacent the end

Art Unit: 2876

containing the open portion that exposes a portion of an opposite side of the circuit card to the memory system of claim 22 for the purpose of allowing the card to be inserted into and taken out of the sleeve.

With respect to claim 25, Le discloses a memory card system, comprising: an enclosed electronic circuit card having first and second spaced apart sets of external surface electrical contacts having different arrangements of contacts (Fig 1 Parts 14 & 15, Col 2 Lines 1-15), a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card through either of the first or second sets of contacts (Col 9 Lines 6-20, Figs 5-8 Parts 52, 68, 76, & 88), a sleeve surrounding the card in a manner allowing the card to be slid by hand between at least a first position and a second position wherein the card is partially removed through an end opening of the sleeve to expose a surface portion thereof containing the first set of contacts, one or more openings through the sleeve in positions that expose the second set of contacts therethrough when the card is in the first position, and wherein the first set of contacts is covered by the sleeve when the card is in the first position and the second set of contacts are covered by the sleeve when the card is in the second position (Col 2 Lines 27-30, Fig 3 Part 29, Fig 4A & 4B Part 39). However, Le does not disclose a first position wherein substantially all of the card is positioned within the sleeve.

However, Nishizawa discloses a first position wherein substantially all of the card is positioned within the sleeve (Fig 13 A&B, Fig 6, Fig 7). Nishizawa teaches about IC card with the zigzag arrangements of plurality contacts on the same side of the card with corresponding mating contacts in the slot.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to add a first position wherein substantially all of the card is positioned within the sleeve to a memory card system, comprising: an enclosed electronic circuit card having first and second spaced apart sets of external surface electrical contacts having different arrangements of contacts, a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card through either of the first or second sets of contacts, a sleeve surrounding the card in a manner allowing the card to be slid by hand between at least a first position and a second position wherein the card is partially removed through an end opening of the sleeve to expose a surface portion thereof containing the first set of contacts, one or more openings through the sleeve in positions that expose the second set of contacts therethrough when the card is in the first position, and wherein the first set of contacts is covered by the sleeve when the card is in the first position and the second set of contacts are covered by the sleeve when the card is in the second position for the purpose of providing a means for protecting the entire card when the card is not communicating with any devices.

With respect to claim 26, Le discloses the system of claim 25, wherein the first and second sets of contacts follow respective first and second different published standards (Fig 1 Parts 14 & 15, Col 2 Lines 1-15).

With respect to claim 27, Le discloses the system of claim 26, the system of claim 26, wherein the first published standard is that of the Universal Serial Bus (USB) (Col 2 Lines 40-54).

With respect to claim 28, Le discloses the system of claim 27, wherein the second published standard is that of the Secure Digital (SD) memory card (Col 2 Lines 40-54).

With respect to claim 29, Le discloses the system of claim 25, wherein the second set of contacts is arranged along an edge of the card. However, Le does not disclose that the one or more openings include a plurality of openings that expose the second set of contacts.

Le (Us 6,890,188) however discloses that the one or more openings include a plurality of openings that expose the second set of contacts (Fig 5A & 5B). Le (Us 6,890,188) teaches about memory card comparable with device connector and host connector standards.

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the one or more openings include a plurality of openings that expose the second set of contacts to the system of claim 25 for the purpose of allowing plurality of smaller hinged covers to cover the openings. This may be beneficial if space around either the device or host connectors is cramped.

With respect to claim 30, Le discloses the system of claim 25, wherein the surface portion of the card containing the first set of contacts is a rectangle having a width less than that of other portions of the card (Fig 2 Part 13: Surface portion of the card containing USB has a width less than other portion of the card).

With respect to claim 31, Le discloses the system of claim 25, wherein the sleeve and the card in the first position together have a size and shape substantially according to the published standard of the Secure Digital (SD) memory card (Col 2 Lines 40-54).

With respect to claim 32, Le discloses the system of claim 25. However, Le does not disclose that a thickness of the card in the surface portion containing the first set of contacts is greater than a thickness of the card in a portion containing the second set of contacts.

Le teaches about shieldless USB tab (Col 3 Lines 34-49, Col 5 Lines 6-24). Le teaches specifically that shieldless USB is thinner than shielded USB tab thus ensuring memory card insertion into portable device. However, shielded USB tab has the advantages in terms of being more structurally sturdy and generally having a better physical wire connection and signal transmission. So it would simply be a design choice to go with shielded USB instead of the shieldless USB for the stated advantages of the shielded USB, in which case thickness of the card in the surface portion containing the first set of contacts (i.e. shielded USB) would be greater than a thickness of the card in a position containing the second set of contacts.

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that a thickness of the card in the surface portion containing the first set of contacts is greater than a thickness of the card in a portion containing the second set of contacts to system of claim 25 for the purpose of accommodating shielded USB tab instead of the unshielded USB tab, which provides the benefit of improved physical wire connection and signal transmission as well as sturdier construction of the USB tab.

With respect to claim 33, Le discloses the system of claim 25. However, Le does not disclose that the first and second sets of contacts are positioned on one side of the card on a common planar surface.

However, Nishizawa discloses that the first and second sets of contacts are positioned on one side of the card on a common planar surface (Figs 1 & 2, Figs 11 & 12: Contacts are

Art Unit: 2876

positioned on the side of the card facing out of the page. In addition, the contacts are grouped into sets of contact such as a set of contacts for the memory card or a set of contacts for the SIM card.).

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the first and second sets of contacts are positioned on one side of the card on a common planar surface to the system of claim 25 for the purpose of simplifying the design of the connectors both on the host side and on the card and keeping the form factor of the card as small as possible. Nishizawa teaches the zigzag arrangements of plurality of contacts on the side of the card with corresponding mating contacts in the slot. To interface with the specific function of the card, the slot's contacts on a single inner surface are arranged to mate with the subset of contacts on the card that correspond to that specific function. Having contacts disperse on multiple surfaces of the card and the slot would complicate the design and having to put difference interfaces either on different surfaces of different edges could potentially force the card to be larger than the standard form factor for the memory card.

With respect to claim 34, Le discloses the system of claim 25. However, Le does not disclose that the first and second sets of contacts are positioned on one side of the card, and the sleeve has an opening adjacent its said end opening on a side opposite to the one or more openings that expose the second set of contacts in order to expose a portion of an opposite side of the card.

Nishizawa however discloses that the first and second sets of contacts are positioned on one side of the card (Figs 1 & 2, Figs 11 & 12: Contacts are positioned on the side of the card facing out of the page. In addition, the contacts are grouped into sets of contact such as a set of

Art Unit: 2876

contacts for the memory card or a set of contacts for the SIM card.), and the sleeve has an opening adjacent its said end opening on a side opposite to the one or more openings that expose the second set of contacts in order to expose a portion of an opposite side of the card (Fig 13 A&B Part 26: This reference refers to a slot, instead of a sleeve.).

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the first and second sets of contacts are positioned on one side of the card for the purpose of simplifying the design of the connectors both on the host side and on the card and for the purpose of being able to add multiple functions to the card without increasing the card's size. Nishizawa teaches the zigzag arrangements of contacts on the card with corresponding mating contacts in the slot. To interface with the specific function of the card, the slot's contacts on a single inner surface are arranged to mate with the subset of contacts that correspond to that specific function. Having contacts disperse on multiple surfaces of the card and the slot would complicate the design and having to put difference interfaces either on different surfaces of different edges could potentially force the card to be larger than the standard form factor for the memory card. In addition, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the sleeve has an opening adjacent its said end opening on a side opposite to the one or more openings that expose the second set of contacts in order to expose a portion of an opposite side of the card to the system of claim 25 for the purpose of allowing the card to be inserted into and taken out of the sleeve.

With respect to claim 35, Le discloses the system of claim 25, wherein the sleeve further includes a resilient sidewall portion with a lip positioned at the end opening of the sleeve that

engages an end of the card when the card is in the first position within the sleeve and holds the card in the first position (Fig 3 Part 26, Col 7 Lines 32-47).

With respect to claim 39, Le discloses a memory card system, comprising: an enclosed circuit card shaped for a first end to be inserted into the sleeve through the opening thereof to abut a physical stop within the sleeve (Fig 3 Part 26, Col 7 Lines 32-47), wherein a portion of the card extends out of the opening of the sleeve with a shape and a second set of contacts according to a USB plug standard (Col 2 Lines 27-30, Fig 3 Part 29, Fig 4A & 4B Part 39, Fig 2 Part 13, Col 3 Line 65 to Col 4 Line 5), the first end of the card abutting the physical stop within the sleeve, a re-programmable non-volatile memory within the card, and electronic circuits within the card that are connected to the non-volatile memory to control its operation (Col 9 Lines 6-20, Figs 5-8 Parts 52, 68, 76, & 88), and connected to the second set of contacts to operate with a signal protocol according to the USB standard (Col 2 Lines 40-54, Col 5 Lines 6-24).

However, Le does not disclose a rectangularly shaped sleeve having a first set of contacts along a first edge thereof with a pattern according to a published memory card standard and an opening along a second edge thereof opposite to the first edge, mating contacts within the sleeve and on the card that connect the card with the first set of contacts when the card is inserted into the sleeve, connected to the mating contacts of the card to operate with a signal protocol according to the published card standard.

Nishizawa however discloses a rectangularly shaped sleeve having a first set of contacts along a first edge thereof with a pattern according to a published memory card standard (Abstract mentions both SD and SIM, both of which are published standards. Fig 1 Part 4) and an opening along a second edge thereof opposite to the first edge of the card (Fig 13 A&B Part 26: This reference



Art Unit: 2876

refers to a slot, instead of a sleeve.), mating contacts within the sleeve and on the card that connect the card with the first set of contacts when the card is inserted into the sleeve, connected to the mating contacts of the card to operate with a signal protocol according to the published card standard (Parts 22 & 2 in Fig 6, Parts 24 & 2 in Fig 7, Parts 26Aa, 26Ab, 26Ac & 2 in Fig 13).

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add rectangularly shaped sleeve having a first set of contacts along a first edge thereof with a pattern according to a published memory card standard and an opening along a second edge thereof opposite to the first edge, mating contacts within the sleeve and on the card that connect the card with the first set of contacts when the card is inserted into the sleeve, connected to the mating contacts of the card to operate with a signal protocol according to the published card standard to a memory card system, comprising: an enclosed circuit card shaped for a first end to be inserted into the sleeve through the opening thereof to abut a physical stop within the sleeve, wherein a portion of the card extends out of the opening of the sleeve with a shape and a second set of contacts according to a USB plug standard, the first end of the card abutting the physical stop within the sleeve, a re-programmable non-volatile memory within the card, and electronic circuits within the card that are connected to the non-volatile memory to control its operation, and connected to the second set of contacts to operate with a signal protocol according to the USB standard for the purpose of enabling alternate interfaces among multiple choice of standard interfaces simply based on the arrangement of contacts on the sleeve. Thus, the sleeve having a first set of contacts along the edge according to the published standard provides the sleeve with an interface according to the first set of memory

Art Unit: 2876

card standards among plurality of available standards, and the opening along a second edge enables memory card insertion into and retrieval out of the sleeve. This system of mating contacts on the card and the sleeve allows the card to have all of the necessary contacts arranged in such a way so that particular interface will be created between the card and the sleeve based on which set of mating contacts are on the sleeve. If different interface to the card is needed, then another sleeve with a different set of corresponding mating contacts on the sleeve can be used with the same multi-function memory card.

With respect to claim 40, Le discloses the memory card according to claim 39, wherein the published card standard is that of a SD card (Col 2 Lines 1-9, Col 2 Lines 40-54).

6. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le (US 6,908,038).

With respect to claim 36, Le discloses an enclosed memory card, comprising: a first portion having a shape, a first thickness and a first set of contacts positioned on an outside surface thereof, all according to a published card standard, a second portion rigidly connected to the first portion and having a rectangular shape, a second set of contacts positioned on an outside surface thereof and a second thickness in at least a region carrying the second set of contacts (Fig 1 Parts 14 & 15, Col 2 Lines 1-15), all according to a USB plug standard (Col 2 Lines 40-54, Col 5 Lines 6-24), and the first and second sets of contacts are positioned on a common side of the card (The contacts on Parts 14 & 15 in Fig 2 are on the same side of the card, the side facing out of page.), re-programmable non-volatile memory within the card, and electronic circuits within the card that are connected to the non-volatile memory to control its operation (Col 9 Lines 6-20, Figs 5-8 Parts 52, 68, 76, & 88), connected to the first set of contacts to operate with a signal

Art Unit: 2876

protocol according to the published card standard and connected to the second set of contacts to operate with a signal protocol according to the USB standard (Col 9 Lines 44-55, Col 10 Lines 4-54). However, Le does not disclose that the second thickness is greater than the first thickness.

Le teaches about shieldless USB tab (Col 3 Lines 34-49, Col 5 Lines 6-24). Le teaches specifically that shieldless USB is thinner than shielded USB tab thus ensuring memory card insertion into portable device. However, shielded USB tab has the advantages in terms of being more structurally sturdy and generally having a better physical wire connection and signal transmission. So it would simply be a design choice to go with shielded USB instead of the shieldless USB for the stated advantages of the shielded USB, in which case thickness of the card in the surface portion containing the first set of contacts (i.e. shielded USB) would be greater than a thickness of the card in a position containing the second set of contacts.

Therefore, it would have been obvious at the time the invention was made to a person having ordinarily skill in the art to add that the second thickness is greater than the first thickness to an enclosed memory card, comprising: a first portion having a shape, a first thickness and a first set of contacts positioned on an outside surface thereof, all according to a published card standard, a second portion rigidly connected to the first portion and having a rectangular shape, a second set of contacts positioned on an outside surface thereof and a second thickness in at least a region carrying the second set of contacts, all according to a USB plug standard, and the first and second sets of contacts are positioned on a common side of the card, re-programmable non-volatile memory within the card, and electronic circuits within the card that are connected to the non-volatile memory to control its operation, connected to the first set of contacts to operate with a signal protocol according to the published card standard and connected to the second set of

Art Unit: 2876

contacts to operate with a signal protocol according to the USB standard for the purpose of accommodating shielded USB tab instead of the unshielded USB tab, which provides the benefit of improved physical wire connection and signal transmission as well as sturdier construction of the USB tab.

With respect to claim 37, Le discloses the memory card according to claim 36, wherein the outside surfaces of the first and second portions are parts of a planar surface on the common side of the card (The contacts on Parts 14 & 15 in Fig 2 are part of a planar surface on the common side of the card, the side facing out of page.).

With respect to claim 38, Le discloses the memory card according to claim 36, wherein the published card standard is that of a SD card (Col 2 Lines 40-54).

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Le (US 2005/0037647) teaches about memory card compatible with multiple connector standard. Mills (US 6,353,870) teaches about closed case removable expansion card having interconnect and adapter circuitry for both I/O and removable memory. Liu (6,676,420) teaches about double interface compact flash card.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae W. Kim whose telephone number is (571)272-5971. The examiner can normally be reached on Mon-Fri 7AM-4:30PM.


Art Unit: 2876

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571)272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae W. Kim  
Art Unit 2876  
Patent Examiner

TWK



**DIANE I. LEE**  
**PRIMARY EXAMINER**